

WHAT IS CLAIMED IS:

1. A personal air purifier for attachment to a user's face and nose comprising:
a filter medium having a periphery with a shape adapted to circumscribe a
5 continuous perimeter including the philtrum, the face posterior to the left alar groove, the
dorsum of the nose and the face posterior to the right alar groove;
an adhesive strip affixed to the filter medium around the periphery to
sealingly bond the peripheral shape to the perimeter on the face.
- 10 2. A personal air purifier as defined in claim 1 wherein the filter medium has a
plurality of slits spaced about at least a portion of the periphery for fitting of the filter
medium to the face about the perimeter.
3. A personal air purifier as defined in claim 2 wherein the slits are substantially
15 perpendicular to the periphery, each slit having a length less than a width of the adhesive
strip.
4. A personal air purifier as defined in claim 1 further comprising a release liner
removeably attached to the adhesive strip distal the filter medium.
- 20 5. A personal air purifier as defined in claim 1 wherein the adhesive strip comprises
adhesive tape attached over a portion of its width to an exterior surface of the filter
medium with a remaining portion of the width extending from the periphery of the filter
medium.
- 25 6. A personal air purifier as defined in claim 1 wherein the adhesive strip comprises
an adhesive layer bonded to an interior surface of the filter medium proximate the
periphery.

7. A personal air purifier for a user's face comprising:

an adhesive strip having a periphery with a shape adapted to circumscribe a continuous perimeter including the philtrum, the face posterior to the left alar groove, the dorsum of the nose and the face posterior to the right alar groove;

5 a filter medium affixed to the adhesive strip, said adhesive strip bonding the peripheral shape to the perimeter on the face and sealing the filter medium.

8. A personal air purifier as defined in claim 7 wherein the filter medium is affixed to a first side of the adhesive strip and the adhesive strip bonds to the perimeter on the
10 face on a second side of the adhesive strip.

9. A personal air purifier as defined in claim 7 wherein the periphery of the adhesive strip is a first periphery with a shape adapted to circumscribe a continuous perimeter including the philtrum, the face posterior to the left alar groove, the dorsum of the nose
15 and the face posterior to the right alar groove and the filter medium is affixed to the adhesive strip at a second periphery inset from the first periphery, said adhesive strip bonding the first peripheral shape to the perimeter on the face and sealing the filter medium on the second periphery.

20 10. A personal air purifier for a user's face comprising:

an adhesive tape having a first periphery with a shape adapted to circumscribe a continuous perimeter including the philtrum, the face posterior to the left alar groove, the dorsum of the nose and the face posterior to the right alar groove;

25 a filter medium affixed at a second periphery to the adhesive tape inset from the first periphery, said adhesive tape bonding the first peripheral shape to the perimeter on the face and sealing the filter medium.

11. A personal air purifier as defined in claim 10 wherein the filter medium comprises two technical vents and said second periphery comprises to apertures in the adhesive.

5 12. A personal air purifier as defined in claim 1 wherein the filter medium comprises a woven polymer fabric.

13. A personal air purifier as defined in claim 1 wherein the filter medium comprises a membrane of expanded microporous polytetrafluoroethylene (ePTFE).

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14. A personal air purifier as defined in claim 1 wherein the filter medium comprises a non-woven polyester media.

15. A personal air purifier as defined in claim 1 wherein the filter medium is a dielectric material that upon exposure to an air stream formed during inhalation of air into the user's nostrils generates an electrostatic charge that is capable of attracting and holding micron sized particulate and allergens.

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16. A personal air purifier as defined in claim 1 wherein filter medium encompasses a volume around the nose that provides a non-restricted area greater than an area defined by the user's nostrils.

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17. A personal air purifier as defined in claim 1 further including a notch in the periphery substantially centrally located at a top of the periphery for drawing periphery adjacent the notch together at the bridge of the user's nose.

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